ABSTRACT

The present invention provides a method for forming a thin film using a CVD process in which a large-scale vacuum exhaust unit or neutralization unit is not required, and a patterning step after the formation of the film is not required.

A pattern 30a composed of a monolayer is formed using (heptadecafluoro-1,1,2,2-tetrahydro)decyl-triethoxysilane on a surface 71 for forming a thin film of a second glass substrate 7. Droplets 5 composed of trimethylaluminum are placed on a plurality of parts of an upper surface 81 of a first substrate 8. The droplets 5 are placed at the positions corresponding to openings 31 of the monolayer pattern 30a. Both substrates 7 and 8 are placed in parallel with a predetermined distance therebetween, and the openings 31 and the droplets 5 are aligned with each other. While supplying nitrogen gas between the substrates 7 and 8, the second substrate 7 is heated to 300 and retained for 5 minutes. Thereby, the droplets 5 are vaporized and the gas is fed into the openings 31. Aluminum resulting from decomposition by heat is deposited in these parts and aluminum thin films 50 are formed.